Title (en)

SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING SEMICONDUCTOR DEVICE

Title (de)

HALBLEITERBAUELEMENT UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

DISPOSITIF À SEMI-CONDUCTEURS ET SON PROCÉDÉ DE FABRICATION

Publication

EP 2457256 A4 20150729 (EN)

Application

EP 10802163 A 20100625

Priority

- JP 2009169599 A 20090718
- JP 2010061299 W 20100625

Abstract (en)

[origin: US2011012112A1] An aperture ratio of a semiconductor device is improved. A driver circuit and a pixel are provided over one substrate, and a first thin film transistor in the driver circuit and a second thin film transistor in the pixel each include a gate electrode layer, a gate insulating layer over the gate electrode layer, an oxide semiconductor layer over the gate insulating layer, source and drain electrode layers over the oxide semiconductor layer, and an oxide insulating layer in contact with part of the oxide semiconductor layer over the gate insulating layer, the oxide semiconductor layer, and the source and drain electrode layers. The gate electrode layer, the gate insulating layer, the oxide semiconductor layer, the source and drain electrode layers, and the oxide insulating layer of the second thin film transistor each have a light-transmitting property.

IPC 8 full level

H01L 29/786 (2006.01); **G02F 1/1368** (2006.01); **G09F 9/30** (2006.01); **H01L 21/02** (2006.01); **H01L 21/28** (2006.01); **H01L 21/336** (2006.01); **H01L 27/12** (2006.01); **H01L 29/45** (2006.01); **H05B 44/00** (2022.01)

CPC (source: EP KR US)

G02F 1/1368 (2013.01 - US); **H01L 21/02554** (2013.01 - KR); **H01L 21/02565** (2013.01 - KR); **H01L 27/1214** (2013.01 - KR); **H01L 27/1225** (2013.01 - EP KR US); **H01L 27/124** (2013.01 - EP US); **H01L 27/1248** (2013.01 - KR); **H01L 27/1251** (2013.01 - EP US); **H01L 27/1255** (2013.01 - EP US); **H01L 29/45** (2013.01 - EP KR US); **H01L 29/78606** (2013.01 - KR); **H01L 29/78645** (2013.01 - US); **H01L 29/78648** (2013.01 - KR); H01L 21/02554 (2013.01 - EP US); H01L 21/02565 (2013.01 - EP US)

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- [A] US 2004038446 A1 20040226 - TAKEDA KATSUTOSHI [JP], et al

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

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